## **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES
Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: <u>SF/ALA</u> Rte: <u>80</u> PM: <u>13.2/13.9</u>

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary Report No: WIR-012716

Address: 333 Burma Road Date Inspected: 17-Mar-2010

City: Oakland, CA 94607

Project Name: SAS Superstructure OSM Arrival Time: 700
Prime Contractor: American Bridge/Fluor Enterprises, a JV OSM Departure Time: 1900

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island Location: Shanghai, China

**CWI Name: CWI Present:** Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

Bridge No: 34-0006 Component: OBG

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

**OBG** Assembly Yard

7BW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 047 located at SEG035\* cross beam side of segment. Welder is identified as Mr. Hu Yanming (062092). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2114-FCM-1.

7BW+7CW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 010 located at OBW7 cross beam side of segment. Welder is identified as Mr. Yun Chuansheng (045221). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2113-B-U2-FCM-1.

7AW + 7BW

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Shield Metal Arc Welding (SMAW) welding was performed on weld joint 004 located at OBW7 cross beam side of segment. Welder is identified as Mr. Zhan Quanfa (066326). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 003 located at OBW7 cross beam side of segment. Welder is identified as Mr. Zang Yanbo (045196). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 003 located at OBW7 cross beam side of segment. Welder is identified as Mr. Jiang Jinyong (066361). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 003 located at OBW7 cross beam side of segment. Welder is identified as Mr. Li Zaijun (037996). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

#### 7BE+7CE

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 008 located at OBW7B bottom plate splice of segment. Welder is identified as Mr. Hu Yanming (062092). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 008 located at OBW7B bottom plate splice of segment. Welder is identified as Mr. Feng Changdou (067572). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

#### 7CE

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 004 located at CA040 on the bike path side of segment. Welder is identified as Mr. Chen Renzhi (058087). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-1 and CWR1227 repair procedure.

Y Location of repairs areas by above noted welder (058087) is located at 13970mm~13780mm.

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 004 located at CA040 on the bike path side of segment. Welder is identified as Mr. Bi Shi (068764). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-1 and CWR1227 repair procedure.

Y Location of repairs areas by above noted welder (068764) is located at 10060mm.

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 004 located at CA040 on the bike path side of segment. Welder is identified as Mr. Sun Lingling (048047). ZPMC QC is identified as Li Yang.

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The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-1 and CWR1227 repair procedure.

Y Location of repairs areas by above noted welder (048047) is located at 8380mm.

Miscellaneous Work In Progress

QA Inspector observed ZPMC's personnel performing various job functions in the trial assembly yard. Locations and description of work are as followed:

6 West

1. Internal scaffolding was removed from segment.

Ship

1. ZPMC welder performing the welding of the sea fasteners to ship deck on the starboard and port side of ZPMC ship.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





#### **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (150-0042-2372), who represents the Office of Structural Materials for your project.

**Inspected By:** 

Alaniz, Joe

Quality Assurance Inspector

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**Reviewed By:** Miller,Mark QA Reviewer